WEST

Freeform Search

Database:

```
US Patents Full-Text Database
US Pre-Grant Publication Full-Text Database
JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins
```

Term:

```
l2 and ticker
```

Display: `10` Documents in **Display Format:** `CIT` **Starting with Number** `1`

Generate: ○ Hit List ● Hit Count ○ Image

| Search | Clear | Help | Logout | Interrupt |

| Main Menu | Show S Numbers | Edit S Numbers | Preferences |

Search History

Today's Date: 11/20/2001

DB Name	Query	Hit Count	Set Name
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l2 and ticker	8	L6
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l2 and rul$2 adj5 identifie$2	2	L5
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l2 and parent adj5 identifie$2	0	L4
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l2 and rul$2 and parent adj5 identifie$2	0	L3
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l1 and symbol	71	L2
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	ticke$2 near3 identifie$2	349	L1

WEST

☐ | Generate Collection |

L6: Entry 2 of 8   File: USPT   Sep 19, 2000

DOCUMENT-IDENTIFIER: US 6122635 A
TITLE: Mapping compliance information into useable format

BSPR:
In one embodiment, access is provided to the computer-readable
file over a computer communications link. In another embodiment,
the acquiring step comprises acquiring the securities information
from the EDGAR database of the Securities and Exchange
Commission. In another embodiment, a file is created that
contains a prospectus of the particular security. In another
embodiment the method the identifying step includes matching a
central index key to any of an internal identification number, a
CUSIP number, or a stock exchange ticker symbol, and determining
if the identification number, CUSIP number, or stock exchange
ticker symbol relates to a particular security. In another
embodiment, the identifying step includes identifying portions of
the acquired securities information as compliance information,
identifying the start and end of the compliance information, and
extracting the compliance information from the securities
information. In another embodiment, the identifying step includes
identifying the effective date of the compliance information,
identifying an amended compliance information item that the
compliance information is amending and determining an effective
date of the compliance information from the effective date of the
amended compliance information item.

BSPR:
In one embodiment, the identifier unique to a particular security
is a CUSIP number. In another embodiment, the identifier unique
to a particular security is a stock ticker symbol. In one
embodiment, the compliance information is a mutual fund
prospectus.

DEPR:
In another embodiment, the acquisition subsystem 310 acquires
documents automatically from EDGAR each day. EDGAR provides an
index of the securities information added each day. The index
lists a central index key associated with each item of securities
information. Acquisition subsystem 310 uses the index to
automatically acquire the most recent information for a specific
list of central index keys. The list of central index keys is
determined from a list of securities each having a unique
identifier. For example, a list of securities identified by CUSIP
number or stock ticker symbol can be mapped into a list of
central index keys.

DEPR:
An internal identification number, CUSIP identifiers, and stock ticker symbols are used to identify a particular security. The internal identification number is unique for each security. A CUSIP number is a number assigned by Standard & Poor's CUSIP Service Bureau, the manager of the American Banking Association's CUSIP number system, to identify a security. A stock ticker symbol is a symbol assigned by a stock exchange to identify a security. An investor is likely to reference a security such as a mutual fund by the fund name marketed to the consumer, the CUSIP number, or the stock ticker symbol, not the investment company name or central index key.

DEPR:
In the disclosed embodiment of cataloging subsystem 312, a securities submission from the queue is presented to a system operator. The system operator is presented with a securities submission visible in one portion of the screen and cataloging information visible on another portion. Line numbers are assigned to each line of the submission. The submission is not permanently modified to include the line numbers, rather, the line numbers are shown only for the purpose of cataloging and extracting the compliance information. The cataloging portion of the screen presents a list of cataloging choices. Cataloging choices include possible CUSIP or stock ticker symbols, the type of compliance information contained in the document (for example prospectus, SAI, etc.), and the start line of each item of compliance information. As the system operator reviews the securities submission, the system operator selects the appropriate cataloging choices.

DEPR:
The compliance information server 325 has access to the compliance information as well as the catalog information about the particular security associated with the compliance information. It can therefore make the compliance information available in a manner that is useful. The information can be accessed in ways the securities information previously could not. For example, all of the compliance information for a particular security can be listed. Because the compliance information server has the information that was entered by the system operator when the document was processed by the cataloging subsystem, all the compliance information for a particular security can be accessed by the name of the security as it is marketed to the customer, the CUSIP number of the security, or the stock ticker symbol of the security.

DEPR:
CUSIP or a stock ticker symbol. The indexer identifies the compliance information associated with that unique identifier. The compliance information server can output a list of each of the compliance information documents that are available. Alternatively, it can output the compliance information. In one embodiment, the compliance information server receives a request for a list of all the information for a particular security. The request is in the form of a request for a web page. In response, the compliance information server 325 outputs a list of the

compliance information. The list is in the form of a world wide
web page that contains links to each of the items of compliance
information. The world wide web page may also contain other
information, including links to other information about that
security.

DEPR:
Referring to FIG. 7, a method for responding to requests for
compliance information includes receiving a unique identifier
(step 450). The unique identifier can be a unique internal
identifier, a CUSIP number, or a stock ticker symbol. The method
also includes transmitting compliance information in response to
the unique identifier (step 452). The compliance information
server is capable of accomplishing the steps of the method
because the compliance information server has the compliance
information and it can associate the compliance information with
the particular security specified by the unique identifier. In
one embodiment, the compliance information is a prospectus for a
mutual fund.

WEST

☐ | Generate Collection |

L6: Entry 5 of 8   File: USPT   Dec 14, 1993

DOCUMENT-IDENTIFIER: US 5270922 A
TITLE: System for distributing, processing and displaying
financial information

ABPL:
A data processing and communication system distributes and
displays financial market ticker, quotation, news and ancillary
information via a plurality of stored program controlled work
stations. Stock trade executions, quotations and other ticker
plant information is communicated in parallel to a hierarchy of
system data processing terminals, e.g., those located at area,
branch and individual work station locations. Storage media at
the several system data processing levels extracts and stores
data base information of differing purport and completeness for
the disseminated data to support the system work station users.

BSPR:
More specifically, it is an object of the present invention to
provide apparatus and methodology to communicate and display
information useful for securities brokers, investors, and others
concerned with financial markets; to provide multiple viewing
windows to display diverse and/or related ticker and other market
information; and which permits interactive user control at system
microprocessor governed work stations.

BSPR:
The above and other objects of the present invention are realized
in a specific, illustrative system for distributing, processing
and displaying financial market ticker, quotation, news and
ancillary information via a plurality of stored program
controlled work stations. Stock trade executions, quotations and
other ticker plant information is communicated in parallel to a
hierarchy of system data processing terminals, e.g., those
located at area, branch and individual work station locations.
Storage media at the several system data processing levels
extracts and stores data base information of differing purport
and completeness for the disseminated data to support the system
work station users.

BSPR:
In accordance with one aspect of the present invention,
information characterizing a dynamically changing sub-population
of the market securities is maintained at and becomes immediately
available to each work station responsive to the pattern of usage
at that specific station. Various derivative tasks, such as
security price limit alerts and customized, selective ticker

displays, are user programmable and are actuated by the work station data base.

DRPR:
FIG. 4 is a flow chart illustrating work station ticker and related processing in accordance with the instant invention.

DEPR:
The basic data characterizing securities trading is generated in the manner per se well known to those skilled in the art. In particular, trading information (e.g., execution prices and volume, and quotations) are supplied by the New York Stock Exchange 28 to a ticker plant 35. Also supplied to ticker plant 35 is comparable trading information from the several so-called regional exchanges 30.sub.1 through 30.sub.n. Other, domestic and worldwide information may be included as well. The output of the ticker plant is information characterizing stock trade executions at the respective exchanges, as well as bid and asked quotation information. The output of the ticker plant 35, as presently constituted and per se known, is the ticker of common experience which is distributed typically via land lines to brokerage houses and other financial institutions.

DEPR:
In accordance with the present invention, the ticker plant output is supplied via a microwave uplink 38 for satellite distribution to receive-only earth stations at the area and branch computer locations 50 and 90. For redundant transmission, the ticker information is also radiated on a multiplexed basis with a television program. Such data multiplexing with a television signal is per se well known and may be included, for example, as digital information modulating the video carrier in the vertical retrace interval to not be recoverable by conventional television receivers tuned to the underlying television program. Receiving equipment 70 at the area and branch computer locations 50 and 90 receives the radiated versions of the ticker plant 35 output.

DEPR:
As a final source of information for the system of FIG. 1, one or more source level 10 news wire source(s) 24 supply financial news via land lines 25 to the various area and branch computers 50 and 90 and, via the branch computers, to the various work stations 110. Illustrative of currently available news wire sources are those provided by Dow Jones and Reuters. Alternatively, the news information furnished by source 24 can be multiplexed and radiated with the output of ticker plant 35 for distribution to area, branch and work station computers.

DEPR:
It is an objective and purpose of the instant invention to make use of the market and news information generated by ticker plant 35 and news wire source(s) 24 at the various system work stations 110. That is, the work stations 110 have a signal entry keyboard 112 which may be employed by a user (e.g., a broker) to specify various kinds of information desired for viewing via his display 107. As above noted, part of the market information resides within his work station in RAM 111. Additional quotations not

already at his location are loaded via multiplexer/demultiplexer 105 under central processor 103 control via multiplexer control port 105.sub.c from the associated branch computer 90 or area computer 50. The information presented at display 107 may comprise a single field of information, e.g., a quotation, a ticker flow or the like. Alternatively, in accordance with one aspect of the instant invention, a multi-window display may be presented via the cathode ray tube 107. Moreover, depending upon the user-entered key strokes, the specific format of the multi-window display may vary. Presenting plural "windows" or fields on a single cathode ray tube display is of course per se well known to those skilled in the art and is available via IBM, Bell Laboratories and others.

DEPR:
One illustrative multi-window presentation for display 107 at a system work station 110 is shown in FIG. 2. The composite presentation has a first field 142 which simply comprises the complete New York Stock Exchange ticker (a series of stock transaction messages for stock executions on that exchange). The field includes a sequence of messages each formed of a stock symbol 143 followed by the volume (in hundreds of shares) 144 and the trade price 145. The price 145 may have its first digit deleted, and volume may be omitted on reasonably busy days to obviate undue ticker delays. Examining, for example, the first trade constituent in the ticker data field 142 in display 107, one viewing the ticker would know that 5,000 shares of the security having an exchange symbol ABC traded at a price of 903/4.

DEPR:
The multiple window display format chosen by the user via keyboard 112 includes a second ticker ("TICKER-2") specified under the user control. In accordance with varying aspects of the present invention, the user may format his own personal ticker by establishing criteria which a trade message from ticker plant 35 must satisfy to pass to the TICKER-2 window field 147 for viewing. The criteria, stored in RAM 111, may specify trades in only a specific enumerated list of securities, trades from specific exchange(s), and/or so forth. This gives rise to a relatively slow speed, focused ticker which eliminates the clutter associated with trading of securities of no interest to the operator of the specific work station 110.

DEPR:
A further, MONITOR field 153 contains price information for a predetermined population of securities of interest to that particular broker. Each entry includes an identification 154 (the stock symbol), a designation 155 of the market where the last trade occurred, an arrow 157 signalling whether the last trade was an uptick or downtick, and the currently obtaining bid and ask prices 158. Finally, a QUICK-QUOTE field 157 provides a quotation for a particular stock (ABC) having a symbol entered by the user via keyboard 112. Reading across the illustrative entry of FIG. 2, the stock symbol is followed by an identifier for the exchange executing the last trade (New York) in the security, an arrow showing the tick direction of the last trade (up), the

trade price (903/4), the current bid (905/8) and asked (907/8) prices and the exchanges where those bid and ask prices came from (bid-Boston and New York, asked-American and Toronto), the bid and ask volume sizes (60 and 5 respectively), the number of shares (230,800) of that security traded so far during that business day, and the time of the last trade (12:02).

DEPR:
As new trades in the monitored 300 security population are reported via the ticker plant 35, communications link receiver 98, demultiplexer 105 and work station central processor 103 automatically change the stored price information in RAM 111. The stored security price information also automatically changes the price presentation for the respective securities wherever a security appears in any of the multiple windows (fields) of the display 107. That is, new price information for any particular stock will change in each window in which that security appears. For example, a price change in the price of the equity whose symbol is assumed to be ABC for the illustrative display of FIG. 2 causes changes in at least the MONITOR field 153, the NYSE Ticker 142, and in the QUICK-QUOTE field 157 all of which derive their refreshed information from the work station data base in RAM 111. If the last trade exceeded a limit, an appropriate message would be generated as well in field 151.

DEPR:
Attention will now be directed to the flow chart of FIG. 3 which presents the operative program for maintaining the data base in the work station 110 RAM 111 to reflect the limited (300) entries most recently queried at that specific work station. The program for dynamically controlling storage at the user's work station 110 is typically stored in the read only memory, or ROM 109 there included although RAM 111 storage is also possible. To reiterate, it is the function of the dynamic storage algorithm to maintain in the variable, RAM memory 111 at the user's station 110 information associated with the 300 securities for which quotations were most recently requested at that station (and which are thus most likely to generate future quotation requests). To this end, RAM 111 includes a "least recently used" or LRU list which stores the stock symbols of the most recently requested 300 (or fewer) securities. It will be assumed that the most recently requested security resides in the top, or first position, in that list; and that the least recently requested symbol is stored at the bottom of the list in a jeopardy position to be purged if a new security, not otherwise in the LRU list, is entered at the work station keyboard 112 (assuming a full complement of 300 items). A processing variable LRUSZ is maintained to indicate the size or number of items in the LRU list. Programming for the instant invention may of course be in any convenient language which is stored and implemented on any of the diverse forms of digital processing apparatus.

DEPR:
To illustrate specific operation of the dynamic storage reallocation algorithm, assume that a broker or other user at the work station 110.sub.i,j,k illustrated in FIG. 1B wishes a quotation on any desired security. He enters the corresponding

symbol for the security as by his signal entry keyboard 112 (functional step 201 in FIG. 3). Test 205 then examines the LRU table to determine whether the newly entered stock symbol is already in the LRU list. If it is (YES output of test 205), test 206 examines the command message entered through keyboard 112 to determine whether the user wishes a full quote (e.g., including historical and derived (e.g., price-earnings ratio) information not locally available at the work station 110 or the more common so-called quick quote price and volume information which is locally available. If a full quote is desired, the work station 110 obtains the historical information from the historical information memory 95 in the branch computer 90.sub.j,k via the communicating demultiplexer 105. If desired, historical information of varying levels of detail may be distributed between the branch and area RAMs 95 and 60. In either event, either the quick quote or full quote after data retrieval from RAM 95 is displayed for the user (step 215) as via the user's cathode ray tube display 107.

DEPR:
Tracing the alternate output path from the test 205, assume that the stock symbol requested was not one recently examined at the specific work station 110.sub.i,j,k and therefore was not in the LRU list locally available from the work station 110 RAM 111 (N.O. output path of test 205). When this condition obtains, the desired quotation is retrieved from the branch RAM 96 (or higher order computer if necessary)--step 220. Depending upon whether a full quote or quick quote was specified by the input command entered by the user at keyboard 112, test 222 fetches the full information from the branch RAM 95 if appropriate (step 224) or skips this operation if only a quick quote was desired. The following operation 227 stores the securities information just obtained in the user's work station variable memory 111, and step 229 sets a flag bit in some predetermined location (e.g., FLAG) to signal that FIG. 3 processing is dealing with a security not previously stored at the user's work station 110 memory 111. As before, the quotation information is displayed in its full or quick (limited) form in the display step 215.

DEPR:
Following delivery of the information to the user's display 107, the symbol for the security just requested by the user is put on top of the LRU list which signals that this security was most recently requested at the work station 110.sub.i,j,k (step 217).

DEPR:
The remainder of the functional operation depicted in FIG. 3 then serves to maintain the least recently used (LRU) list in correct form as well as to maintain the list size variable (LRUSZ) at the correct value. To this end, test 219 examines the contents of the flag bit (FLAG) to determine whether or not the symbol most recently processed was new to the data table (it being new following the N.O. output of test 205 but not for the YES output of that test). If the flag bit was not set (N.O. output of test 219) signalling that the stock symbol (and its concomitant information) was already in the LRU list and in the RAM 111 data table, step 230 searches through the LRU list after position 1

and deletes the second appearance of the symbol in the list. The symbol is deleted since it is known to be in the first or most senior position in the LRU list as a result of step 217 and thus its redundant presence is discarded. That completes operation of the FIG. 3 dynamic storage reallocation for the assumed branch of data processing which thus goes to the end point of the subroutine and passes to system control for other system business.

DEPR:
When test 219 signals that the flag bit was set (YES output signalling that the symbol was new to the LRU list) test 235 next determines whether or not the LRU list is at its maximum size (LRUSZ.gtoreq.300). If it is not, the data table can accept a new symbol without deleting an old one. Accordingly, the LRU size variable is incremented by one (LRUSZ=LRUSZ+1) in step 240, the flag bit is cleared (step 242), and processing is completed. Correspondingly, if the LRU table is full (YES output of test 235), the bottom element in the LRU list is deleted (step 237). The flag bit is then cleared (step 242) ending the routine.

DEPR:
Accordingly, the FIG. 3 mode of data processing automatically maintains within the work station 110 RAM 111 a list (LRU) of the 300 most recently requested stock symbols at that station. The newer of the stock symbols requested are in the top portion of the list while the older symbols are in the bottom part of the list, with symbols being deleted if they are not requested a second time before 300 other quotations are entered at the user keyboard 112.

DEPR:
It will be apparent that the stock symbols in the LRU list and the corresponding stock price values and other information, will vary from time to time for any user of the equipment 110.sub.i,j,k and will differ at any given time for different system work stations presumably having operators who enter different patterns of quotations. The local variable memory 111 of each work station 110 will thereby store the information most likely to be next needed by each station user and which will be quickly available to that person, not requiring interrogation (other than for "historical" information) from any other system computer thus obviating communication and possible queueing delays.

DEPR:
Finally, attention will be directed to the flow chart of FIG. 4 which presents the operative program for dynamically updating data in the user's RAM 111 data base characterizing the stocks having a present application for that user. That is, FIG. 4 depicts the manner in which current price and other market data is loaded into the user's RAM 111 to provide current information for each component of the display (FIG. 2) of the user's cathode ray tube 107. It will be assumed for simplicity of discussion that each separate display application (FIG. 2 field or window) has an associated list in RAM memory 111 of those symbols currently of interest, i.e., there exists a first list (LRU

table) for the 300 most recently requested quotations, a second list for those securities for whom limits are being maintained, further lists for the ticker presentations, and so forth. Each list would contain or have a pointer to all data for each security in that list. Alternatively, a single integrated list and data table may be employed for all stocks for which there is any current application, together with one or more identifiers which record those application(s) for which the stock data is required.

DEPR:
Examining the flow chart of FIG. 4, the first step 301 reads into the computer CPU the next incoming stock symbol, price, volume and related information (ticker message) originated by ticker plant 35, and furnished to the work station 110.sub.i,j,k via its corresponding branch apparatus 70,80,81 via cable 103 and demultiplexer 105. Test 303 examines each of the application stock lists (i.e., the LRU list, the list associated with the limit processing, and so forth). If the security being characterized by the ticker plant message is not in any such list (N.O. output of test 303), control passes to test 320 to determine whether or not the stock data is appropriate for one of the tickers (e.g., 142 or 147 of FIG. 2) in the user display. Assuming that the trade information being reported by ticker plant 35 is germane to one or more of the applications for that specific work station 110, the data base in RAM 111 associated with that security is updated (step 308) to reflect the last trade and quotations for that stock and step 310 updates all applications (windows and the related window-driving storage) associated with that stock as necessary. Thus, as only one example and assuming that the stock having the trade information then being reported by the ticker plant was in the LRU list and data base, the information being reported replaces the older data for that security stored in the data base of the user's RAM 111.

DEPR:
Assuming the stock to be one maintained in the limit table (supporting display field 151 of FIG. 2), test 312 determines whether the trade being reported exceeds any limit bound. If it does not (N.O. output of test 312), system control passes to test 320 for ticker processing. If a limit is exceeded (YES output of test 312), a limit-exceeding message appears in the field 151 of FIG. 2 advising the user of the appropriate circumstances. It will be readily apparent that a price may be tested against upper and/or lower bounds as desired for the investment strategy of the user, or of the customers of the user. In addition, step 317 recalls from the master customer data base 12 via multiplexer 105 the branch modem 91 and all remaining communication apparatus intermediate the data base 12 and work station 110 the name, account number, telephone number and all other desired information for all customers who hold the security for which the user's station has indicated an out-of-limit message. As appropriate the user may contact each such owner of the subject security to determine if any action is desired or to take such automatic action as may be appropriate.

DEPR:

Finally, test 320 examines the subject ticker plant 35 message to determine whether or not it is appropriate under the criteria established by the user at his work station 110 for either of the ticker streams 142 or 147 being displayed. If the criteria is satisfied (YES output of test 320) the message is added to the appropriate ticker display memory or memories for entry into the appropriate ticker. The ticker criteria as above noted is subject to definition by the user. If the user has limited a ticker to a finite group of stocks, the ticker criteria is satisfied if and only if the stock symbol in the incoming message matches a stored desired symbol. Other criteria will be readily apparent, e.g., to display only trades from a particular exchange (part of the data transmitted by ticker plant 35). If the ticker plant message is not appropriate for display on any ticker (N.phi. output from test 320), control passes to the beginning of FIG. 4 processing to await the next trade quotation being supplied by the master ticker plant 35 (or to shift to other system functions).

DEPR:
FIG. 4 processing thus serves to maintain the data in the user RAM 111 current with respect to each of the applications then contemplated by that unit; and to also limit the data shown on the display tickers to that information which the station 110 user wishes to receive. The composite apparatus of FIGS. 1A and 1B operates flexibly to monitor and display only that information which each work station 110 user wishes stored and displayed and to provide rapid access to a limited portion of the very large mass of securities data which serves the particular user pattern and personality of each work station operator, providing rapid access to information which that user is most likely to require.

CLPR:
4. A combination as in claim 1, wherein said variable content memory of at least one of said work stations includes means for storing an identifier for a security in said population and at least one price range bound for said identified security, and wherein said central processor means includes means for indicating when a received ticker message for said identified security has a trade price component which falls outside a stored range bound for said security.

CLPR:
5. A combination as in claim 3, wherein said variable content memory means of at least one of said work stations includes means for storing an identifier for a security in said population and at least one range bound for said identified security, and wherein said central processor means includes means for indicating when a received ticker message for said identified security has a trade price component which falls outside a stored range bound for said security.

CLPR:
8. A combination as in claims 1 or 4, further comprising data processing means including additional memory means, said data processing means including receiver means for receiving serial data supplied by said ticker source means, means for storing in said additional memory means data characterizing a substantially

larger number of said investment security population than said k element sub-population stored in said work station variable content memory means, and means connecting said data processing means with a plurality of said digital processing work stations.

CLPR:
10. A combination as in claim 8, wherein said ticker source means includes transmitting means for providing over-the-air transmission of said current trade information messages, and wherein said ticker receiver means in said data processing means includes means for recovering the current trade information transmitted by said ticker source transmitting means.

CLPR:
11. A combination as in claim 10, wherein said transmitting means of said ticker source means includes means for radiating said current trade information on two redundant channels, and wherein said current trade information receiver means of said data processing means includes means for selecting for reception one of said two redundant transmission channels.

CLPR:
12. In combination in system apparatus for disseminating and selectively processing and displaying financial information for a population of investment securities; said system apparatus comprising a hierarchal arrangement of variable content memory means disposed in a plurality of digital processing individual, branch and area work stations, said hierarchal arrangement characterized by progressively completed variable content memory means, each of said individual work stations including a display, central processor, variable content memory means, memory means containing a program, and signal entry means, said display effecting a coincident multi-window presentation of at least one formatted ticker and plural data fields, said program containing means for controlling said work stations central processor, said variable content memory means including means for storing acceptance criteria for each ticker display and means for storing data characterizing a sub-population of the population of investment securities sufficient for all securities included in said plural data fields; trade information means for furnishing current trade messages for the population of investment securities to said central processors of said work stations; said central processor of each of said work stations including means for operatively selecting data received from said trade information means corresponding to said stored security sub-population and for updating the data in said variable content memory means for said stored security sub-population, and said central processor of said work stations further including means for extracting acceptance criteria from said variable content memory means, means for comparing each received current trade message from said trade information means for selectively displaying at least a portion of said received message in said ticker display.

CLPR:
13. A combination as in claim 12, further comprising additional memory means, means coupled to said ticker source means for

storing in said additional memory means data characterizing substantially all of the population of investment securities, and means connecting said additional memory means with said work stations.

CLPR:
15. A combination as in claims 12 or 13, wherein one of said data fields signals an out-of-limit price for one of said population of securities, wherein said variable content memory means of said work stations includes means for storing a securities identifier and at least one range bound therefor, and wherein said central processor means includes means for displaying an indication when a received ticker message for a monitored security has a trade price component which falls outside a stored range bound therefor.